SHOUT
SHARE
IT

THE

BOTANICAL EXCHANGE CLUB

OF THE BRITISH ISLES.

REPORT FOR 1880.

Manchester:

PRINTED BY JAMES COLLINS & CO., KING STREET.

1881.

MANCHESTER:
JAMES COLLINS AND CO., PRINTERS AND LITHOGRAPHERS,
KING STREET.

REPORT OF THE DISTRIBUTOR FOR 1880.

The most prominent feature of the Club Distribution for 1880 is the smallness of the number of specimens, as compared to previous years, the total number of plants sent being about 3300, as against 4800 of last year. Hence the members' return parcels are necessarily small, the loss falling principally on our few most valuable contributors. Among the more interesting plants sent, is a considerable collection of Orkney species from Dr. Boswell and Mr. H. Halcro Johnston, including a new variety, *Ruppia rostellata*, var. *nana*, Boswell. The Club is much indebted to Mr. Baker, for looking through a number of the specimens, especially the Roses and Mints; to Professor Babington and Dr. Boswell, for their notes and opinions on many of the critical species, especially the *Rubi* and *Hieracia;* to M. Déséglise, for his remarks on some of the Roses and Mints; to the Rev. J. E. Leefe, for his notes on the Willows; to Mr. Arthur Bennett, for examining the *Potamogetons;* and to Mr. Nicholson, for his notes on Iris, etc.

I would call the attention of the members to the fact that a considerable number of the specimens sent to the Club are not sufficiently good to be of much use. It is extremely important, especially with critical species, to have fair-sized, well-selected, and carefully-dried specimens, whereas the whole of the specimens of some of the plants sent I have been compelled to destroy, being too imperfect to be identified by the authorities to whom they were referred. Professor Babington sends the following note on the subject:—"Members should be reminded that very much care and minuteness is requisite in collecting *Rubi: notice and record* the *direction of the barren stem*, the characters from the flowers, especially the *relative lengths and colour* of the stamens and styles. All foreign authors, such as Focke and Genevier, lay very much weight upon these points, and, I think, with reason. But they can hardly be determined from the dried plant; certainly not from imperfect or imperfectly-preserved specimens, such as are often sent to me to name. I am now suffering from my ignorance of the value of these characters formerly. It is very seldom indeed that I find any of these points noted on the tickets sent with the plants. From the want of such notes, and the badness of the specimens in some other point of consequence, I very often cannot venture to append a name to the specimens with certainty."

I have thought it more convenient, for reference, to place the new county records under a separate heading, instead of their being scattered through the Report as previously.

Owing to the late date at which I received the plants, I was unable to get the whole of the return parcels made up before the 16th May, and since then the exigencies of the collecting season have allowed me very little time for this Report.

NOTES ON PLANTS RECEIVED.

Thalictrum maritimum, Fries, var. Hoxa Links, South Ronaldshay, Orkney, August, 1880. Habit and glaucous colour of *maritimum*, but with the elongate achenes of *flexuosum*.—J. T. Boswell. I think that the carpels are not perfectly grown.—C. C. Babington.

Thalictrum flexuosum, Bernh. Cultivated at Balmuto; root from Loch Tay, September, 1880.—J. T. Boswell.

Ranunculus reptans, L. Abundant in several places on the sandy shore of Ulleswater, from Pooley Bridge to Sandwick; none seen on the Cumberland side.—Bolton King. This is the true *R. reptans*, same as from Loch Leven.—J. T. Boswell.

Caltha palustris, L., var. *Guerangerii*. Marshes, near Bramber, W. Sussex, 17th May, 1880.—W. H. Beeby. I believe the true plant; it is one not familiar to me.—C. C. Babington. A single specimen.

Fumaria pallidiflora. Jord. Howtown, Westmoreland, August, 1880. A new county record.—Bolton King. Not good *pallidiflora*, the flowers not being cream-coloured. I have seen both *pallidiflora* and *Borœi* in Cumberland.—J. G. Baker.

Barbarea intermedia, Boreau. In considerable plenty, in a damp spot, much cut up by the feet of cattle, in *old* pasture, near Hawick, Roxburgh, June, 1880.—A. Brotherston. Also from clover-field near St. Weonard's, Herefordshire, 1880.—Augustin Ley.

Camelina sativa, Crantz. Flax-field, Castle Eden Dene, Durham, July, 1880.—J. P. Soutter. *Camelina eu-sativa* of E. B., ed. III.—*i.e.*, it is neither the "*fœtida*" nor the "*sylvestris*" of the London Catalogue. Why the last was introduced into the London Catalogue, and the more frequent *eu-sativa* omitted, I do not know, unless it ought to read b. *fœtida* and c. *sylvestris*, and that a. and b. for these names are slips of the pen.—J. T. Boswell.

Viola hirta, L., var. *calcarea*. Kenley, Surrey, April, 1877.—H. Groves. Correct.—C. C. Babington.

Viola tricolor, L., large flowered form. Smoogrow, Orphir, Orkney, August, 1880.—J. T. Boswell.

Scleranthus biennis, Reuter. Syenitic rocks on the shore of Groby Pool, Leicestershire, 30th May, 1878.—F. T. Mott. *S. biennis*

of Reuter is apparently only a slight form of *annuus*, caused, perhaps, by the seeds germinating in the autumn rather than the spring.—C. C. Babington.

Erodium cicutarium, Herit., var. Flowers pale pink, 4½–5 lines diameter, petals without any spots, beak of fruit only ½–⅝ in. long when fully grown, leaflets more deeply cut, with smaller segments than usual (nearly pinnate, with simple linear-lanceolate divisions). Coast sand-hills, north of Deal, September, 1880.—J. G. Baker. I believe *E. pilosum*, Bor.—C. C. Babington. I recollect noticing this plant at Deal in 1863, but as I was unable to identify it with any of Jordan's splits, I did not name it as a variety.—J. T. Boswell.

Trifolium pratense, L. var. *sylvestre*. Roadside, Stonton Wyville, Leicestershire, August, 1880.—F. T. Mott. Also from Epsom Downs, Surrey, 18th September, 1880.—H. and J. Groves. Right; but that from old pastures, Warwick (H. Bromwich), is, I think, var. a *sativum*.—J. T. Boswell.

Rubus Leesii, Bab. Woodloes, Warwickshire.—R. L. Baker and H. Bromwich. This is the very curious and interesting form which Mr. Bromwich sent last year. It is the plant referred to in my last published notes. It must be joined to *Idæus*.—C. C. Babington.

Rubus suberectus, Anders. Chandler's Whin, near York.—G. Webster. I think *plicatus*; if a prostrate or arching plant, it may be the *fastigiatus* of me formerly, but I think not of *Rubi Germ.* or Genevier. I should like to know if this was an arching plant; there is much difficulty about these fastigiate forms.—C. C. Babington.

Rubus suberectus, Anders. Hatton, near Warwick, September, 1880.—R. L. Baker. I name it *Lindleianus*.—C. C. Babington.

Rubus fissus, Lindl. (Bab.!). South Burn of Quoys, Hoy, Orkney, August, 1880.—J. T. Boswell.

Rubus affinis, W. and N. Chandler's Whin, near York.—G. Webster. Correct.—C. C. Babington.

Rubus Lindleianus, Lees. Wavertree, S.W. Lancs.—J. Harbord Lewis. Correct.—C. C. Babington.

Rubus rhamnifolius, W. and N., extreme. Wimbledon Common, Surrey, August, 1880.—J. G. Baker. Apparently the same as a Yorkshire specimen named *rhamnifolius microphyllus* for Mr. Bagnall by Baker. I place it provisionally with *carpinifolius*.—C. C. Babington.

Rubus imbricatus, Hort. Great Doward, Herefordshire, October, 1878.—Augustin Ley. This is very near indeed to the original *imbricatus*, if not identical with it.—C. C. Babington.

Rubus imbricatus, Hort. Trusham, S. Devon, September, 1880. Professor Babington writes:—"Your *imbricatus* is very near indeed to the original plant. I think that there can be no doubt of their specific identity." It is one of our commonest brambles at Trusham. W. Moyle Rogers.

Rubus ramosus, Blox. Trusham, S. Devon, September, 1880. On "Black Lea," a furzy and rocky hillside, rather sparingly. Corresponds exactly with the Plymouth *ramosus*, though not with Mr. Bagnall's Warwickshire plant.—W. Moyle Rogers. I presume to be correct, but the specimens are not good.—C. C. Babington.

Rubus leucostachys, Sm. Wavertree, S.W. Lancs., September, 1880.—J. HARBORD LEWIS. Yes.—C. C. Babington.

Rubus calvatus, Blox. Chandler's Whin, near York, August, 1880.—G. WEBSTER. Seems to be near *Hystrix*, but the leaves are slightly felted.—C. C. Babington.

Rubus macrophyllus, W. and N. Churchtown, S.W. Lancs., August, 1880.—J. HARBORD LEWIS. It closely agrees with the *heteroclytus* of Bloxam, but not of Müller, which is one of the *Suberecti*. I have placed Bloxam's plant provisionally with *villicaulis* b. *adscitus*.—C. C. Babington.

Rubus amplificatus, Lees. Binley, Warwickshire, August, 1880. J. E. BAGNALL. I call it *Schlechtendalii*.—C. C. Babington.

Rubus Bloxamii, Lees. Sutton Park, Warwickshire, August, 1880.—J. E. BAGNALL. Correct.—C. C. Babington.

Rubus fusco-ater, Weihe. Welsh Newton Common, Herefordshire, September, 1880.—AUGUSTIN LEY. Probably correct.—C. C. Babington.

Rubus atro-rubens, Blox. Shelly, near Solihull, Warwickshire, September, 1880. The specimen I received through the Club in 1880 was so unlike Mr. Bloxam's original specimens, that I have thought it would be well to send specimens from bushes authenticated by Mr. Bloxam. This is an abundant plant in Warwickshire, and is, in my opinion, identical with the plant Mr. Bloxam pointed out to me near Twycross, and Mr. Bloxam held the same opinion.—J. E. BAGNALL.

Rubus glandulosus, Sm. Wimbledon Common, Surrey, August, 1880.—J. G. BAKER. Of course, not *R. glandulosus* of Bellardi; it is typical *Koehleri*.—C. C. Babington.

Rubus Balfourianus, Blox., var. Chandler's Whin, near York, August, 1880.—G. WEBSTER. May, I think, retain that name.—C. C. Babington.

Rubus ulmifolius. Hedge, Grangehill, near Bishop Auckland, South Durham, 26th September, 1880.—J. P. SOUTTER. *R. cæsius*, c. *ulmifolius*.—C. C. Babington.

Rosa ——, South Burn of Quoys, Hoy, Orkney, 12th August, 1880.—H. HALCRO JOHNSTON. A form of *R. mollissima*, apparently stunted by exposure.—J. G. Baker. *R. mollis*., var. *cærulea*, Baker? —A. Déséglise.

Rosa mollisima, Willd. and var. *cærulea*, sent by Dr. BOSWELL from Hoy, Orkney.

Rosa tomentosa, Sm., var. *Woodsiana nobis*. Bush erect, compact. Prickles slender, uniform, decidedly curved, those of the main stem 4–4½ lines long, scar about 4 lines long. Leaves 2½–3 in. long and 2–2½ in. broad; petioles hairy and densely glandular; leaflets elliptic, the terminal 12–15 lines long and 6–9 broad, thinly hairy above and hairy and slightly glandular beneath, serrature copiously compound. Flowers 1–3. Peduncles and calyx-tube glandular. Sepals persistent, becoming erect. Corolla small, pale pink. Styles slightly hairy. Fruit ellipsoid. A form nearly allied to *R. scabriuscula*, from which, however, it differs by its smaller size, more compact habit, narrower leaflets with more compound serratures, more ellipsoid fruit, with decidedly erect

persistent sepals. It differs from *R. fœtida* and *R. sylvestris* by its narrower and much less glandular leaves and hairy styles. Wimbledon Common, Surrey, 1876–8.—H. and J. Groves.

Rosa rubiginosa, L., var. *R. apricorum*, Rip. Down, Box Hill, Surrey, 11th September, 1880.—H. Groves. This appears to be one of our commonest forms of *R. rubiginosa;* the principal characteristics appear to be the large roundish fruit, the deciduous sepals, and the hairy styles. M. Déséglise confirms the name.—J. G.

Rosa dumalis, Bechst., tending towards *subcristata* (fide Baker). Serquoy Burn, Orphir, Orkney, August, 1875.—J. T. Boswell.

Rosa canina, var. *biserrata*. Near Clifton, Westmoreland, Sept., 1880.—Augustin Ley. *R. biserrata*, Merat.—A. Déséglise. A plant under same name from near Bishop Auckland, Durham, September, 1880.—J. P. Soutter. Near *arvatica*.—J. G. Baker.

Rosa Reuteri, Godet. By the Oyce of Firth, Orkney, August, 1880.—J. T. Boswell. Sent also from same locality by H. Halcro Johnston.

Rosa subcristata, Baker, form. (fide Baker). Oyce of Firth, Orkney, August, 1880.—J. T. Boswell.

Rosa coriifolia, Fries. Brusselton, near Bishop Auckland, Durham, October, 1880.—J. P. Soutter. Not typical; the sepals should be decidedly persistent and the leaves simply serrate.—J. G. Baker.

Rosa canina, L., var *Borreri?* Mary Knowl, near Ludlow, Herefordshire, July, 1878.—Augustin Ley. *R. Borreri*, Woods? A. Déséglise. Mr. Baker considers this neither *R. Borreri* nor *R. marginata*, but rather *verticillacantha*.—J. G.

Rosa Bakeri, Déségl. Pooley Bridge, Westmoreland, Aug., 1880. —Bolton King. Mr. Baker now considers this *Watsoni*.*—J. G.

Rosa corymbifera, Borkh., fide M. Déséglise. West border of Bentley Wood, South Wilts, June and September, 1880. A handsome, strongly-arching, well-marked bush, plainly belonging to the aggregate *stylosa*, Desv. "Hairy variety, near *opaca*" is Mr. Baker's note on the label of the specimen I sent him before communicating with M. Déséglise; but it may be at once distinguished from *opaca* (as described in Mr. Baker's monograph) by the long bristly peduncles and the leaflets narrowed to the base, and hairy above as well as beneath. The hairiness of the plant is most remarkable, the leaves being whitish-green beneath and tomentosa-like in tint and texture above; while petioles, stipules, bracts, and even the long leaf-pointed pinnate sepals are all densely clothed with silky hairs, long and short. The flowers are creamy white, and the calyx-tubes and fruits very slender elliptic.—W. Moyle Rogers. Mr. Baker considers that this belongs to the *Stylosæ*, and is near his *Desvauxii*. M. Déséglise, in his Catalogue Raisonné, places *R. corymbifera*, Borkh., among his *Caninæ Collinæ*, and in the clavis to that section gives the characters "folioles simplement dentées," "styles hérissés," "fleur rose," "pédoncules réunis en corymbe, folioles ovales, aiguës aux deux extrémités," with most of which Mr. Rogers's specimens do not agree.—J. G.

---

* Members will please alter labels.—J. G.

Callitriche vernalis, Kütz. Portmeadow, Oxford, July, 1880.—G. C. Druce. Rather *stagnalis*; see fruit and bracts.—C. C. Babington. *C. platycarpa*.—J. T. Boswell.

Sedum Forsterianum, Sm., vars. *glaucescens* and *virescens*. These two (the former from dry exposed rocks at Stanner, the latter from shady damp rocks at the cascade of "Water-break-its-neck," Radnorshire) were cultivated side by side, in my garden, under similar conditions of light and temperature—*i.e.*, in a hot dry corner. This year the former threw up three times as many heads of bloom, the whole plant was more vigorous, and flowered nearly a fortnight earlier than the var. *virescens*.—Augustin Ley. Probably right, but it is impossible to be sure of critical forms of dried Sedums.—J. T. Boswell.

Saxifraga sponhemica, Gmel.? This can hardly be the true plant, judging by the presence of buds in the axils of the leaves of the root-shoots. It is connected by a perfect series with ordinary *hypnoides*, L., on the cliffs of the Llanthony Valley.—Augustin Ley. Mr. Baker named the specimen submitted to him *S. sponhemica*.—J. G.

Helosciadium, ——? Duddingston Loch, July, 1880.—R. H. Wood. This is the *H. nodiflorum*, var. *longipedunculatum*, F. Schultz, which, however, I include under var. *repens* in E.B., ed. iii., where I have mentioned this Duddingston Loch plant.—J. T. Boswell. *Apium nodiflorum*, b. *repens*, of my Manual.—C. C. Babington.

Linnæa borealis, Gronov. Melberstain Woods, Berwickshire, June, 1880. Specimens gathered from a large bed (thirty to forty yards in diameter) in a Scotch-fir wood, near Lightfield. This station has been known for over forty years, and until the present year (1880), when Mr. Stobbs, of Gordon, found it in some other woods in Berwickshire, the only known locality in the district.—Andrew Brotherston.

Galium ochroleucum, Koch. Trusham, South Devon, 12th July, 1880. In some quantity, on a dry stony hedgebank, with *G. verum* and *G. Mollugo*.—W. Moyle Rogers. Box Hill, Surrey.—G. Nicholson.

Galium Mollugo, L., var. A dwarf form, with stems not more than half a foot long, forming dense masses on the dry coast sand-hills north of Deal.—J. G. Baker. I think that I have never seen this curious small form; I presume that it is a form of *G. Mollugo*.—C. C. Babington.

Galium Mollugo, L., var. *Bakeri*. Ufton Wood, Warwick, July, 1878.—R. L. Baker. Not var. *Bakeri*.—J. G. Baker.

Galium elongatum, R. Avon, Hill Wootton, Warwickshire, August, 1876.—H. Bromwich. The so-named form of *G. palustre*.—C. C. Babington.

Carduus nutanti-crispus. Roadside, Stanton Wyville, Leicestershire, August, 1880.—F. T. Mott. I call the larger single-headed specimen *C. acanthoides*; the smaller, with small clustered heads, is very near, if not true *C. crispus*.—C. C. Babington.

Centaurea nigra, L., var. Teddington, Surrey, July, 1880.—J. G. Baker. I would call this var. *decipiens* without a ray.—J. T. Boswell.

Hieracium chrysanthum, Backh. Ascent of Loch-na-gar, Aberdeenshire, 24th July, 1878.—J. Cosmo Melvill.

Hieracium tricum, Fries. Waas, Hoy, Orkney, August, 1880.—J. B. T. Fortescue (sent by Dr. Boswell).

Hieracium prenanthoides, Vill. Paren'r Esgob, Brecon, 25th August, 1880.—Augustin Ley.

Hieracium strictum, Fries. Hobbister Rocks, Orphir, Orkney, August, 1880.—J. B. T. Fortescue (sent by Dr. Boswell).

Hieracium strictum, Fries? Approaching *H. corymbosum*, Fr. Shore, near Regal Burn, Waas, Hoy, Orkney, August, 1880.—J. B. T. Fortescue (sent by Dr. Boswell).

Hieracium crocatum, Fries. Banks of the Wear, Bishop Auckland, South Durham, 19th August, 1880.—J. P. Soutter. A narrow-leaved form of *H. boreale*.—J. T. Boswell.

Hieracium umbellatum, Vill. Birkdale sand-hills, Southport, S.W. Lancashire, 4th September, 1880. Is this *H. filifolium* of Backh.? Charles Bailey. Certainly a very narrow-leaved form; but I have never seen a specimen of Backhouse's *filifolium*.—J. T. Boswell. This closely resembles specimens I found between Dorking and Guildford, on dry sand; but neither Mr. Bailey's plant nor mine is the var. of Backhouse, which has a leafy stem, elongated, narrow, *entire* leaves, and looks quite different from ordinary *umbellatum*. (See remarks in his Monograph).—Arthur Bennett.

Hieracium rigidum, Hartm. Hort. Kew, August, 1880.—J. G. Baker. Not *H. rigidum* of Backhouse, but *H. tridentatum*, Fries. I see in the 11th Edition of Hartman's Handbook, in which the *Hieracia* are worked out by Rindeberg, the name *H. rigidum*, Hartm., is transferred to a plant called *H. tridentatum*, Fries, in the 9th edition; and *rigidum*, of the 9th edition, is in the 11th combined with *H. Friesii*.—J. T. Boswell.

Monotropa Hypopitys, L., var. *hirsuta* (*H. multiflora*, Scop.). Beech wood, near Farnborough, Hants, July, 1880.—D. Mc.Laurin (sent by Mr. G. Nicholson).

Erythræa sphærocephala, Townsend. Chalk Downs, Isle of Wight, 13th August, 1880 (*vide* Journ. Botany for 1879, p. 327, and paper read at Linn. Soc., 2nd December, 1880).—F. Stratton. Mr. Townsend, in Journal of Botany for March, 1881, p. 87, describes this as *E. capitata*, Willd., var. a. *sphærocephala*, giving Willdenow's *type* plant as the var. b. *Willdenowiana*.—J. G.

Linaria repenti-vulgaris. Farningham, West Kent, 7th August, 1880.—J. Groves. This seems most to resemble the form found at Bodmin, Cornwall, by Mr. H. C. Watson.—J. T. Boswell.

Veronica spicata, L. Culford Heath, Suffolk, 26th August, 1879. Coll. J. D. Gray; comm. E. F. Linton.

Mentha sylvestris, L. Hedge, Pra Sands, West Cornwall, 28th August, 1880.—H. Groves. *M. Willdenowii?*—A. Déséglise.

Mentha sylvestris, L. Hedge near Carbis Bay, West Cornwall, 24th August, 1880.—H. Groves. *M. Ripartii*, Déségl. et Durand. —A. Déséglise.

Mentha pubescens, Willd., var. *palustris*. Marsh, Pra Sands, West Cornwall, 28th August, 1880. This and the two preceding were kindly shown to me by Mr. Ralfs.—H. Groves. *M. pubescens*, Willd.; Wirtgen! exsic. Ed. ii., No. 67. Corolle glabre à l'intérieur. —A. Déséglise.

Mentha gracilis, Sm., b. *cardiaca*. Haseley, Warwickshire.—R. L. Baker and H. Bromwich. *M. cardiaca*, Gerarde.—A. Déséglise.

Mentha gentilis, L. Haseley, Warwickshire.—R. L. Baker and H. Bromwich. *M. Crepiniana*, Durand.—A. Déséglise. *M. sativa*, var. *subglabra*.—J. G. Baker.

Calamintha menthifolia, var. *Briggsii*. Barningham, West Suffolk, August, 1880. These specimens are rather slender compared with what I have found in Devon; but they seem to have the elongated peduncle, "equalling or exceeding the pedicel of the central flower."—E. F. Linton. Mr. Briggs writes me respecting this: "I quite agree with you as to the Calamint not being good *Briggsii*. I look on *Briggsii* as only a slight variety, and often meet with plants just between it and the type. This specimen of Mr. Linton's I would not myself label *Briggsii*, notwithstanding the length of some of the peduncles of the lower verticillasters; the flowers and leaves should be larger, and the plant more bristly hairy."—J. G.

Myosotis palustris, With. Bank of Bovey stream, by Jew's Bridge, Knighton Heath, S. Devon. Collected by Mr. T. R. Archer Briggs and me on August 28th, 1880, in this the first Devon station, where it has certainly been observed by either of us. It seems as completely absent from the Teign Valley proper as from the whole Plymouth neighbourhood. Perhaps it may prove quite a local plant in the extreme South-west of England.—W. Moyle Rogers.

Primula scotica, Hook. Common in sandy pasture on the Links of Dunnet, Caithness. I send specimens collected by me on 1st May, 1880, which have each one flower-scape, and have flowered once this year. I also send specimens collected by Miss M. M. Brock on 12th, 13th, and 14th July, 1880, which have each two scapes—one in fruit, the other in flower. In May, 1880, in company with Miss Brock, I visited the locality; we marked twelve plants, each of which had one scape in flower. During the year my friend observed and recorded the progress made by these plants; on the 5th July the flower-scapes of May were in fruit, and seven of the plants in flower for the second time; by 16th August the flower-scapes of July were in fruit, and two of the plants had flowered a third time. Thus, of the twelve plants observed, five flowered once, five twice, and two thrice.—H. Halcro Johnson.

Salicornia radicans, Sm., and *S. herbacea*, L., b. *procumbens*. Dawlish Warren, South Devon, August, 1877.—W. Moyle Rogers.

Rumex, hybrid between *pulcher* and *conglomeratus*, second generation. Cultivated at Balmuto, from seed of plant raised from seed of specimen from Plymouth.—J. T. Boswell.

Rumex crispus, L., b. *elongatus*. Tidal mud of the Wye, Tintern, Monmouthshire, 26th July, 1880. Very abundant, and the earliest flowering dock; nuts well formed on July 26th, when *R. conglomeratus* was in flower, earlier than ordinary *crispus*, *trigranulatus* growing with it. Stature of this dock enormous, height often 6 ft. The root-leaves vary very much in breadth and crisping, and seem to be narrower and flatter the lower the plant grows on the level of the tide-way.—Augustin Ley. This is less perfectly trigranulate than the var. *trigranulatus*, and the granules are smaller in proportion to the size

of the petal; but I have observed similar changes take place in a plant of ordinary *trigranulatus* from the Fife coast, which I have cultivated in the garden at Balmuto for some years.—J. T. Boswell.

Polygonum aviculare, L., e. *rurivagum*. Roadside, Birstal Hill, Leicestershire, August, 1880. The five specimens marked * are all parts of one plant, too large to be preserved entire. It is much more diffuse and flaccid than typical *rurivagum* (which grew within a few feet of it), but has the long silvery ochreæ, the acute ascending leaves, and the green and crimson perianth of that form. The plant is almost entirely barren, having only two flowers, and this may account for its abnormal habit; but it is perhaps doubtful whether it should not be referred to *agrestinum* or *vulgatum*.—F. T. Mott. I think this is *rurivagum*, but evidently growing under some unusual circumstances.—J. T. Boswell.

Euphorbia pseudo-cyparissias. Dry bank, Henfield, West Sussex, June, 1880. Abundant and thoroughly naturalized, but evidently an escape from the garden of the late Mr. Borrer.—W. H. Beeby.

Salix fragilis, L. Pondside, near Hatfield, Herts, May and August, 1877.—H. Groves. This is the same as the male plant which I brought from Essex, many years ago. The female of *S. fragilis* has narrower leaves, with shallower serratures.—J. E. Leefe.

Salix triandra, L., autumn flowering. Hort. Kew, August, 1880. J. G. Baker. From the leaves being broader above and a good deal rounded at the base, this may be *S. amygdalina*.—J. E. Leefe.

Salix rubra, Huds. Thames side, near Putney, Surrey, March and October, 1878.—H. Groves. Leaves long, and generally broader than this, in the male plant; but I should call it *rubra*. The filaments do not appear much connected.—J. E. Leefe.

Salix Forbyana, Sm. Thames side, near Putney, Surrey, April and September, 1877.—H. Groves. Leaves rather long, and not as broad as usual towards the point; but I think it *Forbyana*. Stigmas undivided.—J. E. Leefe.

Salix Helix, L.? Thames side, near Putney, Surrey, April and September, 1877.—H. and J. Groves. Not *S. Helix* of Smith, I think, which ought to have leaves attenuated and oblique at the base; the leaves most resemble *S. Woollgariana*, but the catkins are not soft enough, and are most like forms of *S. ramulosa*, Borr., which perhaps the plant really is. *S. ramulosa* does not form a tree, but *S. Woollgariana* does.—J. E. Leefe.

Salix Lapponum, c. *pseudo-glauca*. Foot of Lochnagar, August, 1879.—Collected by J. Lamont, for E. A. Lomax. Differs both from *S. glauca*, Sm., and from *S. glauca*, L. I am unacquainted with *S. pseudo-glauca*.—J. E. Leefe.

Potamogeton ——? From the Tweed and Teviot. I sent a number of specimens in 1876, labelled *P. nitens* (see Report for 1876, p. 35), where it will be seen that Dr. Boswell considered them to be "very luxuriant specimens" of *P. nitens*. Dr. Trimen, in a footnote, Journal of Botany, viii., p. 289, referring to the same specimens, writes: "It does not appear to me to be that species [*nitens*], but a large form of *P. decipiens* approaching *P. prælongus*, probably *P. salicifolius*, Wolfg." After seeing the above note, I wrote to Dr. Trimen, asking him to give it a name. His reply was:

"It is not very easy to give a name to your Roxburgh plant further than that suggested in my footnote. Some of the larger foreign specimens of *P. decipiens* come very close. From *P. salicifolius*, Wolfg.! of which we have the type here, it differs in the more rounded base and more obtuse apex of its leaves, but might pretty well go to it." Through the kindness of Dr. Boswell, I have examples of *P. nitens* from four different localities. The Tweed and Teviot plant differs from all these, and is also very different from Mr. Ley's Herefordshire *P. salicifolius*, distributed through the Club (see Report, 1877, p. 10).—Andrew Brotherston. A dubious plant, and it is not easy to give a name without fruiting specimens. I cannot think it comes under *P. nitens*. It approaches specimens named *P. undulatus*, Wolfg., and in its peduncles and spikes it resembles *P. salicifolius*, Wolfg.—Arthur Bennett.

Potamogeton heterophyllus, Schreb., form with broad-based submerged leaves. Kirbister Loch, Orkney, July, 1875.—J. T. Boswell.

Potamogeton zosterifolius, Schum. Canal, Warwick, 1877.—R. L. Baker. 1878.—H. Bromwich.

Potamogeton pectinatus, L., *genuinus*. Loch of Kirbister, Orphir, Orkney, August, 1880.—J. T. Boswell.

Potamogeton filiformis, Nolte. Mud at bottom of brackish water near the Bridge of Brogar, Loch of Harray, Orkney, 24th September, 1880.—H. Halcro Johnston.

Zannichellia polycarpa, Nolte, var. *tenuissima*, Fries. Kirbister Loch, Orphir, Orkney, August, 1880.—J. T. Boswell.

Ruppia rostellata, Koch, var. *nana mihi*. In the Oyce of Firth, Orkney, August, 1880. Stem creeping, wholly buried in the mud, which is covered by the sea at high water. Peduncles very short, curving downwards, so as to bury the fruit in the silt; stalks of the nuts usually shorter than in the ordinary form of *R. rostellata*, but many times longer than the nuts; nuts very oblique and rostrate, as in *R. rostellata;* leaves setaceous; sheaths not swollen. This plant is much like No. 205 of Balansa's "Plantes d'Algérie," 1852, named *Ruppia maritima*, var. *acaulis*, J. Gay, from "Bords de la Macta, dans une mare d'eau salée," but that has the nuts nearly regular, greatly swollen, and not rostrate; indeed, they are very like those of *R. Drepanensis*, Tineo, which I have from Sicily. The Orkney plant has some resemblance to *R. brachypus*, Gay, but has shorter stems, narrower sheaths, and much longer stalks to the nuts, which are less swollen and distinctly rostrate.—John T. Boswell.

Zostera angustifolia, Reich. Oyce of Firth, Orkney, August and September, 1880.—J. T. Boswell and H. Halcro Johnston.

Alisma lanceolata, With. Coleshill Pool, Warwickshire, Sept., 1876.—H. Bromwich. Not *lanceolata*, With.—J. G.

Iris Pseudacorus, L. Swampy meadow, Kelvedon, Essex, June, 1880.—E. G. Varenne. This appears to me to be the *I. pseudo-Acorus*, Boreau, Flore du Centre, 3^{me} éd., tome 1er, p. 635. Botanical Exchange Club Report, 1878, p. 19. *I. acoriformis*, Bor., the more widely-distributed and common form, is readily (as far as my experience goes) distinguished by the different colour and shape of its outer perianth-segments and the much broader stigmas. To do justice to the critical forms of *Iris*, a flower, to accompany each

specimen, should be pulled to pieces, and the perianth-segments, stigmas, &c., dried separately.—Geo. Nicholson.

Luzula pilosa, Willd., var. *Borreri*. Bishopswood, Herefordshire, 17th May, 1880.—Augustin Ley. *Luzula Borreri* is not properly distinguished from *pilosa*. The specimen is too young.—C. C. Babington.

Juncus lamprocarpus, Ehrh. In damp sandy places on the coast, below Harlech Castle, W. Merionethshire, 19th July, 1880.—Charles Bailey. Seems to me to be *nigritellus* (see E. B. S., 2643).—C. C. Babington. This might almost be called *nigritellus*, which, however, I believe to be dependent on conditions of growth.—J. T. Boswell.

Carex rupestris, All. Little Craigindal, Aberdeen, July, 1880.—B. King.

Carex fulva, Good., var. *sterilis*, E. B., ed. iii. Swanbister, Orphir, Orkney, August, 1880.—J. T. Boswell.

Carex fulva, Good., var. *speirostachya*. Olchon Dingle, Herefordshire, 17th June, 1880.—Augustin Ley. This is the *C. Hornschuchiana*, Hoppe, which name has the priority of *C. speirostachya*, Sm. The late Mr. Pryor has shown in his valuable paper in the Journal of Botany (1876, p. 35) that it cannot be included under *C. fulva*, Good., which name, if retained, would appear to be applicable to the series of plants nearer allied to *C. flava*, probably including *C. xanthocarpa*, Dégl.—J. G.

Spartina Townsendi nobis. Plant 1½–4 feet high. Leaves falling short of the spikes; lamina almost flat, broadest at the base, jointed to the sheath. Spikes usually 4–9, somewhat spreading, 4–7 inches long; spikelets 15–30, imbricate, but not crowded; glumes slightly hairy on the keel; rachis exceeding the last spikelet. This is the plant referred to by us in the Journal of Botany for 1879, p. 277, as a form of *S. stricta*; it, however, occupies so intermediate a position between that species and *S. alterniflora*, that it appears desirable not to include it under either. *S. Townsendi* differs from *S. alterniflora* by its more slender stem, leaves falling short of the spikes, and the laminæ being jointed to the sheaths; from *S. stricta* by its much greater size, longer and more numerous spikes, and by the rachis much exceeding the last spikelet. It grows in denser patches than either, and is noticeable among the *alterniflora* by its taller stems and yellower flowers. Our plant agrees in some respects with the *S. stricta*, var. *glabra*, of Asa Gray's Manual; from Muhlenberg's description, we think his *S. glabra* should be referred to *S. alterniflora*, but have seen no specimens. Mud flats, near Hythe, South Hants.—H. and J. Groves.

Phleum pratense, L., var. near *serotinum*, Jord. Kew, Surrey, August, 1880.—J. G. Baker.

Aira ——, Ben Voirlich, Perthshire, 1878.—J. Cosmo Melvill. *A. flexuosa*, a very interesting form; it has three perfect flowers in a spikelet, and I never saw such a thing before. In the sections of *Aira* as characterized in the English Botany, &c., the mark most insisted upon is that *Deschampsia* has two perfect flowers and a rudimentary third, and that in *Avenella (flexuosa)* the rudimentary third is absent; in this specimen it is not only present, but fully developed.—J. G. Baker. A single specimen.—J. G.

Koeleria albescens. St. Brelade's Bay, Jersey, June, 1879.—J. Cosmo Melvill. I have no hesitation in calling this *Koeleria cristata;* it certainly is not *K. albescens*, D.C., a type specimen of which, thanks to the courtesy of M. Casimir de Candolle, I received some time ago from Geneva. The true *albescens* is a much smaller plant than that now noticed, and its true characteristics seem fairly given by Boreau, Flore du Centre, 3me éd., tome 1er, p. 718. Mr. Melvill's plant does not differ from specimens collected by myself in several inland as well as maritime localities, and named *K. cristata* by our great British authority on Grasses, the late General Munro.—George Nicholson.

Festuca ovina, L., var. *glauca.* Close turf, Herefordshire Beacon, Malvern Hills, Herefordshire, 20th May, 1880.—Augustin Ley. I should not separate from the type.—C. C. Babington. I should have called this the ordinary form, and not *glauca*, but the glaucous colour may have faded in drying; the true var. *glauca* has usually leaves much firmer, and, as far as I have seen, is confined to the neighbourhood of the coast.—J. T. Boswell.

Bromus asper, Murr., approaching *Benekenii.* Limestone woods, Great Doward, Herefordshire, 27th July, 1880. This variety of *asper*, whether *Benekenii* or not, is distinguishable at a glance from the ordinary form, and when growing together, subject to the same conditions of light and moisture, it is uniformly about a week in advance of the ordinary form. I have never noticed any intermediates, although having come across the variety at as many as ten different stations in Herefordshire and other counties during the last few years, unless weak panicles of *asper*, thrown up in late autumn, are to be counted so. These often have the upper sheath glabrous, and the lower panicle branches, which are seldom more than two, curved upwards, as in var. *Benekenii*, not divaricate nor deflexed as in ordinary *asper.* Has any botanist noticed the "little scale" mentioned by Dr. Trimen, in Journ. Bot., vol. x., p. 333, as supporting the ramifications of the inflorescence in these two grasses? I have repeatedly searched for it, and only once discovered it in ordinary *asper*, when it answered admirably to the description there quoted from Lange; never in the present variety.—Augustin Ley. I have read over the Rev. Augustin Ley's notes, and in them I see he says that in late autumn weak panicles of *asper* often have the upper sheath glabrous; if this be so, I think we must abandon *Benekenii* as a possible sub-species, as it is the only character I have found which is not variable in plants raised from seeds from the same individual plant.—J. T. Boswell. This seems to show that *Benekenii* is not worth attention, unless it is something unknown to me.—C. C. Babington.

Asplenium germanicum, Weiss. Pass of Llanberis, June, 1871. This is not the Swiss plant that goes by the name *A. germanicum* or *A. alternifolium*, which is brittle and more slender, has generally an upright growth, and is surrounded by a thick girth of the stumps of last year's fronds; it is also of a dull green. The Llanberis plant is somewhat tough and broader, and the fronds arch away from the centre, and are varnished like *A. septentrionale.* I saw no surrounding of old broken-off fronds. On taking the Llanberis plant to Kew, a

good many years ago, I found it was known as *A. Breynii* at the beginning of this century.—T. BUTLER. Just half-way between type *germanicum* and type *Ruta-muraria*.—J. G. Baker. *A. Ruta-muraria*, var. *pseudo-germanicum*, Milde !—J. T. Boswell.

Athyrium incisum, Roth? The specimens sent seem to agree very well with some received under this name from Mr. Watson, through the Exchange Club, and have the character mentioned by him in Topographical Botany, part ii., p. 496, well marked. The wood in which they grew was fairly open and free from undergrowth, which would force the plant up; but I am bound to say that on revisiting the spot in September, for the sake of obtaining mature specimens, I could not find plants so characteristic as those sent, while intermediates, with the lower pinnæ more or less running down into smaller ones at the bottom of the stipe, were common: the wood at that time was much filled with a tall growth of bracken.—AUGUSTIN LEY. *A. filix-fœmina*, not *incisum*.—J. G. Baker.

Aspidium aculeatum, Sm., var. *lobatum*. Hedge bank, Treverannen, St. Weonards, Herefordshire, 31st July, 1880.—AUGUSTIN LEY. Mr. Baker considers the pinnules too much cut and the plant not sufficiently rigid for *lobatum*.—J. G.

Ophioglossum vulgatum, L., b. *ambiguum*, C. and G. Pasture at the top of crags at the sea-shore, Fara, Orkney, 20th August, 1880. A new Orkney station, discovered by Mr. James Johnston, jun., and myself. In 1880 Miss I. B. Irvine Fortescue found three new stations in Orkney, viz., Hunda, Ryosa Little, and the south-east end of Cava. Mr. William Evans found it at Zinksness, Hoy, in July, 1880. There are now ten known stations in Orkney, and all of them are at the sea-shore.—H. HALCRO JOHNSTON.

Isoetes Morei, D. Moore. Lough Bray, Co. Wicklow, October, 1880.—FRED. MOORE. Sent by Mr. NICHOLSON. Ought never to have been named as a species; it is only an interesting form of *I. lacustris*.—C. C. Babington.

Chara vulgaris, L., var. *papillata*. I send two forms of this variety from West Sussex. On the one from Joulsfield Common, Professor Nordstedt remarks: "*Chara fœtida, subhispida, macroptila et macroteles, superne ad brachyphylla.*" On the other form, from near Bramber, he remarks: *Chara fœtida, subhispida, macroptila et macroteles, superne ad longifolia.*" It will, of course, be understood that Professor Nordstedt is not responsible for the naming of the *actual* plants now sent, but they are from the same gatherings as, and to the best of my belief identical with, those which he has examined.—W. H. BEEBY. I should label the Bramber plant var. *longibracteata*, and that from Joulsfield ordinary *vulgaris*.—J. G.

Chara vulgaris, L., var. *longibracteata*. Small pond near Shalfleet, Isle of Wight, October, 1880.—GEORGE NICHOLSON.

Chara fragilis, Desv., var. *Hedwigii*. Kingston, Surrey, October, 1880.—GEORGE NICHOLSON.

Nitella gracilis, Ag. Mr. NICHOLSON has collected a small piece of a plant, which is apparently a large form of this species, among *C. fragilis, Hedwigii*, at Kingston. This is a very interesting discovery, as the plant has not been found in England for many years, and is probably extinct in Borrer's Sussex locality.—J. G.

EXCLUDED SPECIES.

Potentilla recta, L. On rubbish at Mortlake, Surrey, June, 1880. J. G. Baker.

Crepis nicæensis, Balb. Pasture, Inworth, Essex, June, 1880. E. G. Varenne.

Symphytum "peregrinum, Ledeb."—Baker. [*S. uplandicum*, Nyman. *S. orientale*, Fries. (non Linn.) *S. Donii*, D.C. ?] (See Reports, Botanical Exchange Club, 1878, p. 17, and 1879, p. 23.) Plentiful on the sides of a brook in the upper part of the Via Gellia, a quarter of a mile below Grange Mill, between Cromford and Winster, Derbyshire, 26th June, 1880.—Charles Bailey.

Symphytum orientale, L. Railway bank, Richmond, Surrey, 20th May, 1880.—George Nicholson.

Crocus biflorus, Mill. Barton Park, near Bury St. Edmunds, Suffolk.—W. H. Beeby and A. Bennett. Typical *biflorus* is figured in Bot. Mag., t. 845 ; this is *C. præcox*, Haw., E.B.S., t. 2645.—J. G. Baker.

Allium paradoxum, Don. Binny Craig, Linlithgow, 22nd April, 1880.—A. Craig Christie.

Luzula albida, D.C. This plant was found in 1879, on a bank near Bletchingley, Surrey, by Mr. William Mitten, who recorded it in the "Gardeners' Chronicle" for July 5th, 1879, and stated that he considered "its further discovery almost a certainty" on the moist shaded banks about Reigate. Having been favoured with the exact locality, I visited the spot, but, after several hours' search in the neighbourhood, could see nothing but Mr. Mitten's original tuft. A lengthened residence in Reigate during the early summer of 1879, and frequent visits since, lead me to conclude that the plant does not occur elsewhere in the district, and I think it undoubtedly a casual. On visiting the spot this year (1880) I could not see the tuft, which would seem to have disappeared.—W. H. Beeby.

Carex vulpinoidea, Michx. Near the Thames, Kew, Surrey, June, 1880.—George Nicholson.

Malcolmia maritima, *Silene gallica*, *vespertina* and *quinquevulnera*, *Linum grandiflorum*, *Medicago falcata*, *Linaria canadensis* and *Pelisseriana*, *Echium violaceum* and *Phacelia parviflora*, from some new gravel that was laid down, two years ago, to repair the Surrey bank of the Thames, opposite Sion House, midway between Kew and Richmond.—J. G. Baker.

NEW COUNTY RECORDS, &c.

Ranunculus reptans, L. 69. Westmoreland; Ulleswater, August, 1880.—Bolton King. Queried for Westmoreland in Topog. Bot.

Fumaria pallidiflora, Jord. 69. Westmoreland; Howtown, August, 1880.—Bolton King.

Cardamine sylvatica, Link. 16. W. Kent; near Sidcup, May, 1880.—J. Groves.

Cardamine impatiens, L. 16. West Kent; near Eden Bridge, May, 1880.—W. H. Beeby. (See Journ. Bot., 1880, p. 242.)

Barbarea intermedia, Boreau. 36. Herefordshire; Trolloway Brook, St. Weonards, May and June, 1880.—Augustin Ley. 80. Roxburgh; near Hawick, June, 1880.—A. Brotherston.

Thlaspi arvense, L. 16. W. Kent; near Plumstead, August, 1880.—J. Groves.

Viola Curtisii, Forster. 60. W. Lancaster; Lytham, June, 1876.—J. Cosmo Melvill.

Sagina apetala, L. 23. Oxford; June, 1880.—G. C. Druce.

Spergularia marginata, Syme. 11. S. Hants; near Hythe, August, 1876.—H. Groves. (See Journ. Bot., 1879, p. 344.)

Trifolium scabrum, L. 11. S. Hants; Hamble Common, July, 1878.—H. Groves. (See Journ. Bot., 1879, p. 344.)

Geum intermedium, Ehrh. 23. Oxford; Noke Woods, May, 1880.—G. C. Druce.

Myriophyllum spicatum, L. 111. Orkney; Loch of Stenness, at Bridge of Brogar, August, 1880.—J. T. Boswell. Confirmation of County Record.

Callitriche obtusangula, Le Gall. 19. N. Essex; Maldon, June, 1878.—H. Groves.

Aster Tripolium, L. 111. Orkney; Oyce at Firth, August, 1880. J. T. Boswell. Confirmation of County Record.

Crepis taraxacifolia, Thuill. 10. Isle of Wight; near Brook, May, 1880.—J. Groves.

Hieracium iricum, Fries. 111. Orkney; Pyat Burn, Waas, Hoy, August, 1880.—J. B. T. Fortescue. Sent by Dr. Boswell.

Erythræa pulchella, Fries. 16. West Kent; near Orpington, October, 1879.—H. Groves.

Gentiana Amarella, L. 16. West Kent; near Shoreham, August, 1880.—J. Groves.

Rumex palustris, Sm. 59. S. Lancaster; Wavertree, September, 1880.—J. Harbord Lewis.

Euphorbia Paralias, L. 10. Isle of Wight; near Thorness Bay, September, 1879.—J. Groves. (Recorded by Mr. Townsend in Journ. Bot., 1879, p. 315.)

Potamogeton lanceolatus, Sm. 29. Cambridge; Burwell Fen, August, 1880.—Arthur Bennett. (See Journ. Bot., 1880, p. 276.)

Potamogeton acutifolius, Link. 21. Middlesex; Staines, July, 1879.—H. Groves. 27. E. Norfolk; Buckenham, between Norwich and Yarmouth, August, 1880.—Arthur Bennett.

Potamogeton obtusifolius, M. and K. 49. Carnarvon; near Criccieth, July, 1880.—C. Bailey.

Potamogeton mucronatus, Schrad. 23. Oxford; Canal, August, 1880.—G. C. Druce.

Potamogeton trichoides, Cham. 25. E. Suffolk; between Melliss and Redgrave, August, 1880.—Arthur Bennett. (See Journ. Bot., 1880, p. 317.)

Ruppia spiralis, Hartm. 111. Orkney; Bridge of Brogar, August, 1880.—J. T. Boswell.

Epipactis latifolia, All. 16. W. Kent; near Halstead, August, 1880.—J. GROVES.

Carex elongata, L. 13. W. Sussex; near Billingshurst, June, 1880.—W. H. BEEBY.

Festuca ambigua, Le Gall. 28. W. Norfolk; Santon Warren, between Brandon and Thetford, June, 1880.—ARTHUR BENNETT.

Chara vulgaris, L. 25. E. Suffolk; between Redgrave and Melliss, August, 1880.—ARTHUR BENNETT.

CORRECTION OF REPORT FOR 1879.

Under *Hieracium boreale* (p. 16) some lines are left out, either by myself in copying, or by the printer. As the paragraph stands at present it is unintelligible. It should read (from four lines from bottom of page 16): "Specimens from this station, in my herbarium, are named *H. gothicum* [by Mr. J. Backhouse; but they are certainly *H. boreale.* It comes near a plant from the Border, sent me some years ago by Mr. A. Brotherston, which (trusting to Mr. Backhouse's naming of the Kingcausie plant) I named at the time *H. gothicum*], though afterwards I rightly, &c."—J. T. BOSWELL.

JAMES GROVES.

30th June, 1881.

JAMES COLLINS AND CO., PRINTERS, KING STREET, MANCHESTER.